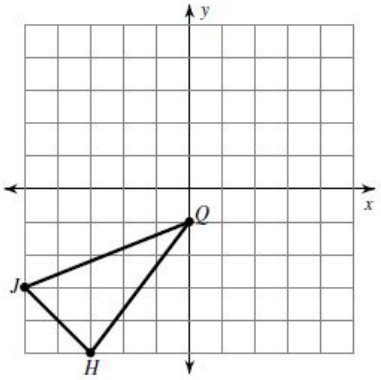
Name: _____

Rotations Practice

Graph the image. List the coordinates of the image. Then write the rule in proper notation.

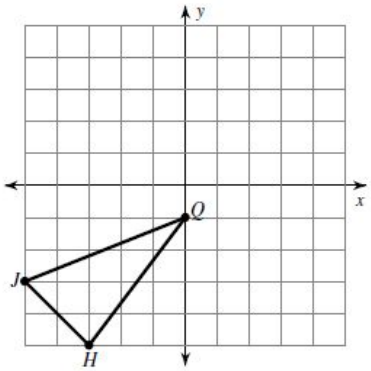
1) Rotate ΔJOH -90° about the origin.

Rule: _____



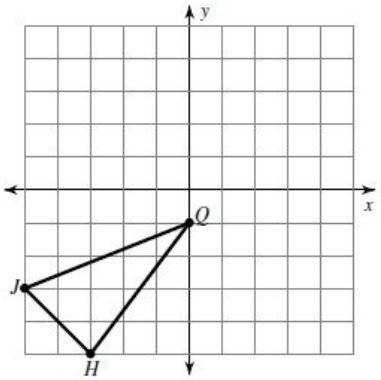
2) Rotate ΔJOH 180° CCW about the origin.

Rule: _____



3) Rotate ΔJOH 180° CW about the origin.

Rule: _____



4) What do you notice about #2 and #3?

_____

_____

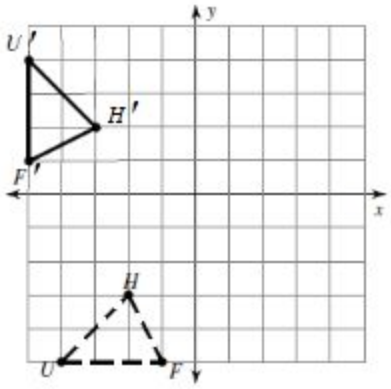
_____

_____

_____

Describe the rotations below using one clockwise rotation and one counter-clockwise rotation.

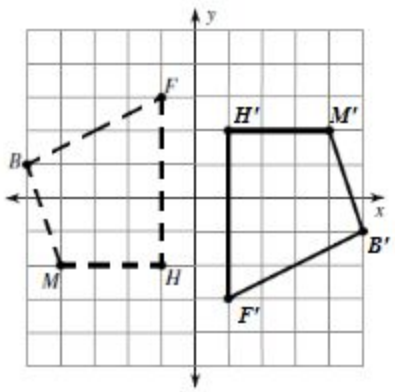
5)



This rotation could be described

as _____° CW, or _____° CCW

6)

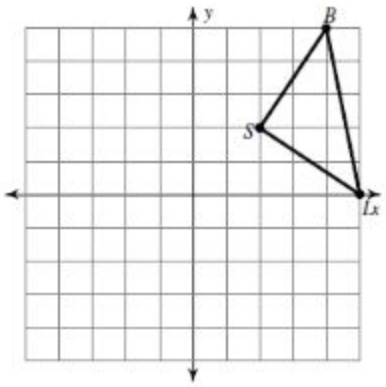


This rotation could be described

as _____° CW, or _____° CCW

7) Say instead of rotating about the origin, you want to see what would happen if you rotated about another point -- say, the point (1, 3). What would that look like?

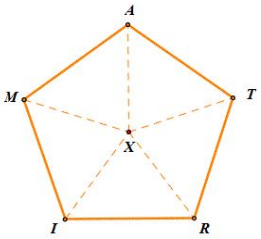
Rotate the triangle below 90° CW about the point (1, 3).



8) Say instead of rotating on a coordinate plane, you decide to rotate within a different shape.

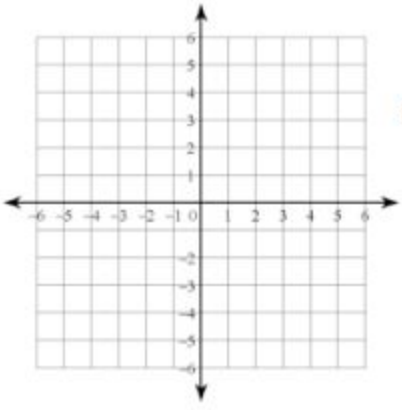
a) How many degrees would each rotation be within the pentagon MATRI below? Why?

b) Find the image of point M rotated 216° clockwise about point X.



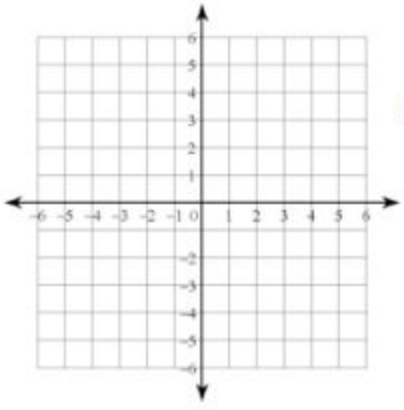
Graph the preimage and image. List the coordinates of the image. Then write the rule in proper notation.

9) Δ TRL: T(2, -1), R(4, 0), and L(1, 3)
-90° about the origin.



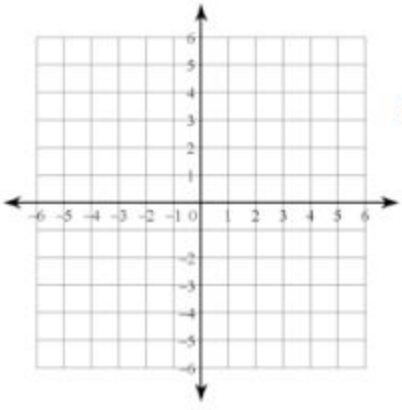
Rule:

10) Δ CDY: C(-4,2), D(-1, 2), and Y(-1, -1)
270° clockwise about the origin.



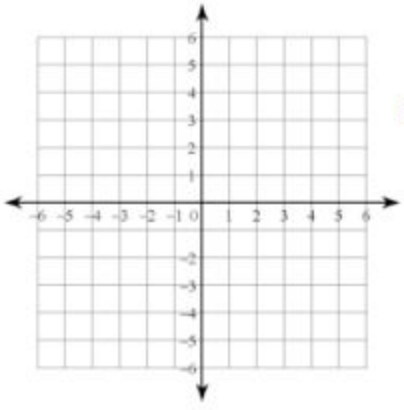
Rule:

11) Δ RST: R(2, -1), S(4, 0), and T(1, 3)
90° counter clockwise about the origin.



Rule:

12) Δ FUN: F(-4, -1), U(-1, 3), and N(-1, 1)
180° clockwise about the origin.



Rule: